



Docket No.: 4468-032

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Is the Application of

Masashi KANAI

Application Number 10/090,007

Filed: March 5, 2002

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Attention: OIPE

For: PICTURE DISPLAY SYSTEM, PICTURE DATA PROCESSING METHOD, AND  
PROGRAM FOR PERFORMING COLOR CORRECTION OF OUTPUT  
PICTURES (*As Amended*)

**PRELIMINARY AMENDMENT**

Assistant Commissioner For Patents  
Washington, DC 20231

Dear Sir:

Preliminary to examination of the above-referenced application, please amend the  
application as follows:

**IN THE TITLE:**

Please change the title to read:

--PICTURE DISPLAY SYSTEM, PICTURE DATA PROCESSING METHOD, AND  
PROGRAM FOR PERFORMING COLOR CORRECTION OF OUTPUT PICTURES--

**IN THE CLAIMS:**

3. (*Amended*) An image display device according to claim 1, wherein said one-dimensional color  
correction table used in said second color correction means is for adjusting the color temperature.

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4. *(Amended)* An image display device according to claim 1, wherein said one-dimensional color correction table used in said second color correction means is for correction responsive to a change in brightness of an external illumination.
5. *(Amended)* An image display device according to claim 1, wherein said one-dimensional color correction table used in said second correction means is for correction responsive to a change in color of a projection plane.
6. *(Amended)* An image display device according to claim 1, wherein said one-dimensional color correction table used in said second color correction means is for correction responsive to a change in color of an external illumination.
7. *(Amended)* An image display device according to claim 1, further comprising means for inputting said characteristic value.
8. *(Amended)* An image display device according to claim 1, which is a projector.
9. *(Amended)* An image display device according to claim 2, wherein the rewrite of lattice point data by said rewrite means is not performed when said characteristic value is a characteristic reference value.

**REMARKS**

The above-referenced application is amended to delete the multiple dependencies of claims 3-9, and to avoid the multiple dependent claim filing fee. Additionally, minor editorial changes were made to the title which was translated from Japanese into English so as to make the title agree with the Declaration.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Mark-Up Version Showing Changes" for your reference.

Respectfully submitted,

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## SPECIFICATION

[Image Display Device, Image Processing Method and Program]

PICTURE DISPLAY SYSTEM, PICTURE DATA PROCESSING METHOD, AND PROGRAM FOR PERFORMING COLOR  
CORRECTION OF OUTPUT PICTURES

[0001]

Background of the Invention

1. Field of the Invention

The present invention relates to an image display device and an image processing method, wherein a desired color compensation is performed for an output image, as well as a program used therefor.

[0002]

2. Related Art

In the case of an image display device such as a projector, the color of a displayed image may change because a color reproduction region differs depending on the type of the display device used. To avoid this inconvenience, there usually is performed a processing called color matching for matching color characteristics of the image display device used to color characteristics of a conventional CRT monitor.

[0003]

Further, in case of using an image display device such as a projector, it is important that an image intended by a producer be reproducible even if an external environment changes. Particularly, unless a change in brightness or color of external illumination or a change in color of a projection plane is taken into account as a change in external environment,

## WHAT IS CLAIMED IS

1. An image display device for performing an image processing for an inputted image data, comprising:

a first color correction means which performs a desired color correction for said inputted image data on the basis of a characteristic value of said image display device and by reference to a three-dimensional color correction table, said three-dimensional color correction table being for matching color characteristics of said image display device to reference color characteristics; and

a second color correction means which performs a desired color correction for said inputted image data by reference to a one-dimensional color correction table, said one-dimensional color correction table being for making a color correction according to an external environment.

2. An image display device according to claim 1, wherein said first color correction means is provided with a rewrite means for rewriting lattice point data of said three-dimensional color correction table on the basis of said characteristic value.

3. An image display device according to claim 1 [or claim 2] wherein said one-dimensional color correction table used in said second color correction means is for adjusting the color temperature.

4. An image display device according to any one of claims 1 [to 3], wherein said one-dimensional color correction table used in said second color correction means is for correction responsive to a change in brightness of an external illumination.

5. An image display device according to any one of claims 1 [to 3], wherein said one-dimensional color correction table used in said second correction means is for correction responsive to a change in color of a projection plane.

6. An image display device according to any one of claims 1 [to 5], wherein said one-dimensional color correction table used in said second color correction means is for correction responsive to a change in color of an external illumination.

7. An image display device according to any one of claims 1 [to 6], further comprising means for inputting said characteristic value.

8. An image display device according to any one of claims 1 [to 7] which is a projector.

9. An image display device according to any one of claims 2 [to 8] wherein the rewrite of lattice point data by said rewrite means is not performed when said characteristic value is a characteristic reference value.